

TASK: P758359



WK PKG: PR ET-093-TS-0011
ENG GRP: ETM
TSK LDR:

FLOC: VAB
MLOC: ET-93
STS/FLT: 107 /001

TITLE: SEVERAL AREAS OF DAMAGED FOAM ON THE INTERTANK AT THE
-Y/+Y LOCATIONS.

OPERATIONS LIST

NUMBER	TITLE	DEPT/SHOP
TaskBarCode	OperationBarCode	
10	SEVERAL AREAS OF DAMAGED FOAM ON THE INTERTANK AT THE -Y/+Y LOCATIONS.	
20	SEVERAL AREAS OF DAMAGED FOAM ON THE INTERTANK AT THE -Y/+Y LOCATIONS.	53700 SCH



United Space Alliance

Constraint Revision Record

WAD Number

Original Constraint

ET-093-TS-0011

T6248, Seq. 40-1

Rationale (If Constraint None)

ERROR ON ENG.

SIGNATURES	VERIFIED	DATE
R Brewer ETM-SE	10-30-02	

New Constraint

T6248-Seq. 50-7

Tair Use

Rationale for Change

ERROR ON ENG.

SIGNATURES	VERIFIED	DATE
R Brewer ETM-SE	10-30-02	10-30-02

New Constraint

OMI-50003, Seq. 03-002

Tair Use

Rationale for Change

PR IN WORK

SIGNATURES	VERIFIED	DATE
R Brewer ETM-SE	10-31-02	

New Constraint

Tair Use

Rationale for Change

SIGNATURES	VERIFIED	DATE

New Constraint

Tair Use

Rationale for Change

SIGNATURES	VERIFIED	DATE

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FOAM DAMAGE ON INTERTANK FOAM INSTALLATION

Element/End Item: **ET**
Flow/Usage: **STS-107**
Facility: **VAB**
Design Center Concurrence: **NA**
Category:
OPR: **ETM**
TTL ORG: **SE**

**This document does not contain
hazardous operations.**

WC
108
USA

10-30-02

10/30/02 09:58:09 AM

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PR ET-093-TS-0011

Approval Record

FOAM DAMAGE ON INTERTANK FOAM INSTALLATION

Technical Contact: R. Brewer

Phone: 1-4429

Category II TOP Only

This Approval Record is for all Operation No(s) listed below:

Initial Released

Operations: 10 _____

Added Operations: 20 _____

Deleted Operations: _____

Replaced Operations: _____

Change Index Added WC 134 USA _____

Comments: _____

Check Family Type: In Family ☒ Out of Family ☐ NMA ☐

Organization	Name (Printed)	Name (Signature)	Date
ETM-SE	R. Brewer	<i>R. Brewer</i>	10-30-02
SE Check	Tom Ford	<i>Tom Ford</i>	10-30-02

SPC
421

10/31/02

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20



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PR/ET-093-TS-0011

Approval Record

FOAM DAMAGE ON INTERTANK FOAM INSTALLATION

Technical Contact: R. Brewer Phone: 1-4429

Category II TOP Only

This Approval Record is for all Operation No(s) listed below:

Initial Released

WC
134
USA

Operations: 10, 20

Added Operations: _____

Deleted Operations: _____

Replaced Operations: _____

Change Index Added

WC
134
USA
10-31-02

Comments: _____

Check Family Type: In Family ☒ Out of Family ☐ NMA ☐

Organization	Name (Printed)	Name (Signature)	Date
ETM-SE	R. Brewer	<i>R Brewer</i>	10-31-02
SE Check	M. Wollam Tom Ford	<i>Tom Ford</i>	10-31-02

10/31/02
(SPD)



1



122
MC

1



1



WAD:

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[illegible]

20

17

200

10

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1.0 INFORMATION

1.3 Operations List

Operation		Shop/ Cntl Rm Console	OPR	Haz (Y/N)	Duration (Hrs)
No.	Title				
10	Map, measure and obtain photos	OPS/ NA	ETM	N	3.0
20	Sand / Blend Foam Damage and Summary / Closure	OPS/ NA	ETM	N	3.0

2.0 SAFETY INFORMATION

2.4 Reference Safety Documentation

Number	Rev	Title
KHB 1710.2	LI	KSC Safety Practices Handbook
GSOP 5400	LI	Ground Safety Operating Procedure

3.0 STAGING REQUIREMENTS

3.2 Parts, Materials, Equipment, and Special Tools

3.2.4 Non-Flight Materials

OPERATION 20

Part No./Find No.	Nomenclature	Qty	Unit
5350-00-K04-7563	320 grit abrasive paper	12	sheets

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5.0 CONFIGURATION ACCOUNTING AND VERIFICATION

OPERATION 10 Map, measure and obtain photos

Shop: OPS

Cntrl Rm Console: NA

OPR: ETM

Zone: NA

Hazard (Y/N): N

Duration (Hrs): 3.0

INTERIM SUMMARY

During inspection per OMI T6248, areas of damage foam divots were found missing from several stringers and ribs on the +Y / -Y locations on the Intertank. This damage was apparently caused when this tank was demated in HB-1 and moved to HB-2 per OMI T 0033. At this time the demensions of these damaged areas is unknown. The following disposition will take photos and obtain measurements. Red dye may be needed if there are debonds and loose material at the the bottom. Based upon data obtained, these defects may meet drawing requirements. However, some will need to be sanded / blended to adjacent foam surfaces.

- 10-1** At the -Y Intertank location, Use attachment no. 1 as a reference to identify the location of foam damage on the rib / stringers. List findings below in the table as to location and item. Use a staedtler Lumocolor marker no. 317 to mark each foam defect as 1, 2, 3, 4, ect.. Use a six inch scale and a depth micrometer along with a pin gauge to measure each damaged area. The pin gauge shall be inserted through the center of each defect down to the substrate.


Table 10-1	Location	Length	Width	Depth	Pin gauge depth
1.	-Y R-12	4.250	.250	.187	.750
2.	-Y R-18	1.125	.375	.187	.500
3.	-Y R-20	1.000	.375	.187	.500
4.	-Y R-21	1.500	.375	.187	.625
5.					
6.					

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At the +Y Intertank location, Use attachment no. 1 as a reference to identify the location of foam damage on the rib / stringers. List findings below in the table as to location and item. Use a staedtler Lumocolor marker no. 317 to mark each foam defect as 1, 2, 3, 4, ect. Use a six inch scale and a depth micrometer along with a pin gauge to measure each damaged area. The pin gauge shall be inserted through the center of each defect down to the substrate.

Table 10-2	Location	Length	Width	Depth	Pin gauge depth
1.	+Y R6	.750	.250	.250	.625
2.	+Y R8	1.000	.250	.125	.500
	+Y R12	1.500	.250	.125	.500
	+Y R14	.250	.250	.125	.625
5.	+Y R15	.625	.375	.250	.500
6.	+Y R20	1.000	.500	.250	.625


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10-3

Obtain still photos of the foam defects that have been identified in the two tables above.

Work Order No. 54514QW:  10/30/02

Notify ET Engineering to review the results listed in the tables.

Eng. Matt Hall 10/30/02T:  10-30-02

Further Dispo to follow:

*** End of Operation 10 ***

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OPERATION 20 Sand / Blend Foam Damage and Summary / Closure

Shop: OPS

Cntrl Rm Console: NA

OPR: ETM

Zone: NA

Hazard (Y/N): N

Duration (Hrs): 3.0

WARNING

Trimming/abrading TPS is hazardous. Personnel shall be attired in chemical splash goggles, long sleeve disposable coveralls and solvent resistant gloves

CSR-569

Use (12) sheets 5350-00-K04-7563 320 grit abrasive paper to sand / blend the foam damage areas to adjacent surfaces as identified in Tables 10-1 and 10-2. Use care as to not increase the depth of the area. Use a vacuum cleaner or wipe with clean dry rymple cloth to remove any foam dust.

T:



DT 3 1 2002

SUMMARY / CLOSURE

During pre move inspection per OMI T 6248, several areas (10) of damage foam were found on the Intertank SOFI at the +Y / -Y / locations. Measurements were taken on these areas along with using a pin gauge to measure the remaining foam thickness below each damaged area. These measurements showed that there is a minimum of 0.500 inch of foam under each defect. Per drawing 80971118413, sht.131, there should be a minimum foam thickness of 0.300 inch at these locations. The rough edges on these defects were blended to adjacent foam surfaces. No further action is required for this PR.

RC action is not needed.

Cause: Workmanship / inadvertently caused while performing OMI T0033.

20-2

Close this PR.

QW:



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*** End of Operation 20 ***

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SIMILAR

